

LISTING OF CLAIMS

1. (Currently Amended) A method of increasing an immune response to an opportunistic infection in an immunocompromised subject comprising
 - selecting an immunocompromised subject infected with a secondary infection, wherein the immunocompromised subject is immunocompromised as a result of an infection with human immunodeficiency virus (HIV) or a simian immunodeficiency virus (SIV), and wherein the secondary infection is infection with a *Leishmania*;
 - administering to the immunocompromised subject infected with the secondary infection a therapeutically effective amount of an oligodeoxynucleotide comprising the nucleic acid sequence set forth as SEQ ID NO: 176, an oligodeoxynucleotide comprising the nucleic acid sequence set forth as SEQ ID NO: 177 and an oligodeoxynucleotide comprising the nucleic acid sequence set forth as SEQ ID NO: 178~~an immunostimulatory D oligodeoxynucleotide, wherein the D oligodeoxynucleotide is at least 18 nucleotides to about 30 nucleotides in length and comprises a sequence represented by the following formula:~~

5'-X₁X₂X₃Pu₁Py₂CpG Pu₂Py₄X₄X₅X₆(W)_M(G)_N-3' (SEQ ID NO: 22)

wherein the central CpG motif is unmethylated, Pu is a purine nucleotide, Py is a pyrimidine nucleotide, X and W are any nucleotide, M is any integer from 0 to 10, and N is any integer from 4 to 10; and
 - assessing the immune response to the *Leishmania* in the subject;
 - thereby increasing the response to the *Leishmania* in the immunocompromised subject.

2-3. (Canceled)

4. (Previously Presented) The method of claim 1, wherein the human immunodeficiency virus is HIV-1.
5. (Previously Presented) The method of claim 1, wherein the human immunodeficiency virus is HIV-2.

6. (Previously Presented) The method of claim 1, wherein the subject has acquired immune deficiency syndrome (AIDS).

7-8. (Canceled)

9. (Currently Amended) The method of claim 1, wherein one or more of nucleotides 3-15 of SEQ ID NO: 176, nucleotides 2-18 of SEQ ID NO: 177, or nucleotides 3-15 of SEQ ID NO: 178 comprise~~P_u₁P_y₂CpG P_u₃P_y₄~~comprises phosphodiester bases.

10. (Currently Amended) The method of claim 1, wherein P_u₁P_y₂CpG P_u₃P_y₄ nucleotides 3-15 of SEQ ID NO: 176, nucleotides 2-18 of SEQ ID NO: 177, and nucleotides 3-15 of SEQ ID NO: 178 are phosphodiester bases.

11. (Canceled)

12. (Currently Amended) The method of claim 1, wherein X₁X₂X₃comprises one or more of nucleotides 1 or 2 of SEQ ID NO: 176, nucleotide 1 of SEQ ID NO: 177, or nucleotides 1 or 2 of SEQ ID NO: 178 comprise phosphorothioate bases.

13. (Currently Amended) The method of claim 1, wherein X₄X₅X₆(W)_M(G)_Ncomprises one or more of nucleotides 16-20 of SEQ ID NO: 176, nucleotides 19 or 20 of SEQ ID NO: 177, or nucleotides 16-20 of SEQ ID NO: 178 comprises phosphorothioate bases.

14-17. (Canceled)

18. (Previously Presented) The method of claim 4, further comprising administering to the subject a combination of drugs which comprises a highly active anti-retroviral therapy (HAART).

19. (Currently Amended) The method of ~~claim 2~~ claim 1, further comprising administering an anti-retroviral drug.

20. (Previously Presented) The method of claim 19, wherein the anti-retroviral drug comprises 3'-azido-3'dexoy-thymidine (AZT).

21-24. (Canceled)

25. (Currently Amended) A method of increasing an immune response to an opportunistic infection with a pathogen in an immunocompromised subject, comprising selecting an immunocompromised subject wherein the subject is immunocompromised as a result of an infection with a human immunodeficiency virus; and

administering to the subject a therapeutically effective amount of an oligodeoxynucleotide comprising the nucleic acid sequence set forth as SEQ ID NO: 176, an oligodeoxynucleotide comprising the nucleic acid sequence set forth as SEQ ID NO: 177 and an oligodeoxynucleotide comprising the nucleic acid sequence set forth as SEQ ID NO: 178 immunostimulatory D-oligodeoxynucleotide, wherein the D-oligodeoxynucleotide is at least 18 nucleotides to about 30 nucleotides in length and comprises a sequence represented by the following formula:

5' X₁X₂X₃Pu₄Py₂CpG Pu₃Py₄X₄X₅X₆(W)_M(G)_N-3' (SEQ ID NO: 22)

wherein the central CpG motif is unmethylated, Pu is a purine nucleotide, Py is a pyrimidine nucleotide, X and W are any nucleotide, M is any integer from 0 to 10, and N is any integer from 4 to 10,

wherein an antigenic epitope of a polypeptide from the pathogen is not administered to the subject,

thereby increasing the response to the opportunistic infection, wherein the pathogen is a *Leishmania*.

26-39. (Canceled)